
LESOTHO AGRICULTURAL PRODUCTION SURVEY CROPS 2005/2006



TABLE OF CONTENTS

1. Introduction.....	1
1.1 Sample Selection.....	1
1.2 Data Collection.....	2
2. Area Planted.....	2
2.1 Summer Crops.....	2
2.2 Winter Crops.....	3
3. Area Harvested.....	3
3.1 Summer Crops.....	3
3.2 Winter Crops.....	5
4. Production.....	5
5. Yield per Hectare.....	6
6. Area under Crop Failure-Summer Season.....	8
6.1 Maize Area (ha) Failed.....	8
7. Reasons for Crop Failure-Maize.....	9
8. Sorghum Area (ha) Failed.....	9
8.1 Reasons for Crop Failure-Sorghum.....	10
9. Area under Crop Failure-Winter Season.....	11
10. Reasons for Crop Failure-Winter.....	12

ANNEX

LIST OF TABLES

Table 1 Area Planted by Crop and District, Summer 2005/2006.....	2
Table 2 Area Harvested by Crop and District, Summer 2005/2006.....	4
Table 3 Maize and Sorghum Yields by District and Zone for 2005/2006.....	7
Table 4 Area Failed under Maize by District/Zone.....	8
Table 5 Area Failed under Sorghum by District/Zone.....	10
Table 6 Crop Failure by District/Zone and Crop Type.....	11

1. Introduction

Agricultural Production Survey (APS) is an annual survey, which is undertaken by Bureau of Statistic. It runs from the 1st of August of the current year to 31st July of the following year. APS concentrates on the production of both livestock and crops for the rural parts of the country. This report is intended to look into agricultural events on crops and its production during 2005/2006 Agricultural year.

The 2005/2006 crops statistics report has covered information on area planted and harvested, production and yield for each of the following major crops: maize, wheat, sorghum, beans and peas. Other mixtures of crops such as maize and beans; maize and sorghum; sorghum and beans are also included in the analysis. Area (in hectares), which failed under each crop and reasons for crop failure are also explained.

1.1 Sample Selection

Two or three Enumeration Areas were grouped together to form Primary Sampling Units (PSU's). A multi-stage stratified sampling scheme was used, where a total of eighty PSU's were selected at the first stage in rural areas of the country. Farming households constitute Secondary Sampling Units (SSUs). An average of 26 households in each PSU was selected. Ten fields for each of the main crops per PSU constitute the sample for crop cutting. Systematic Sampling was adapted for the selection of farming households and fields for crop cutting.

Agricultural Production Survey only looks at farming households. Farming households include:

- Households operating at least one field
- Households raising at least one cow or five and more goats and/or sheep
- Households with both fields and livestock.

It follows that household which do not meet any of the above requirements are not classified as farming households and are therefore not included in the survey. Fields that are rented in by the selected households were included since the household is operating such fields. Similarly, fields that are rented out by the selected households were not included because the household is not operating them. Likewise fields which are being share-cropped are only counted on the owner's side (i.e. if both partners are selected for that particular agricultural year, the field is only counted on the owners' side).

about 12 percent in area planted for wheat. Wheat was mostly grown in the mountain zones and is rarely grown in the lowlands in summer.

Table 1 further shows that total area planted to beans was 10,897 ha in 2005/2006, which was less than 11,465 hectares planted in 2004/2005. The lowlands of Maseru and Leribe contributed to the decrease in area planted for beans in 2005/2006 with 2,870 and 1,042 hectares respectively.

Even though peas is one of the five major crops grown in the country, this agricultural year, 2005/2006 peas was less grown as compared to the previous year 2004/2005. In 2005/2006 about 1,999 hectares were planted to peas whereas in 2004/2005 about 2,804 hectares were planted.

Farmers in all districts seemed to have resorted to growing a mixture of maize and beans. Farmers with limited number of fields commonly practice growing mixtures of crops. Area planted to maize & beans mixture was 31,637 hectares in 2005/2006 which was higher than 53,830 ha of the previous year.

2.2 Winter crops

In Lesotho the major crops that are grown in winter are wheat and peas, though barley and oats are still grown as animal fodder in winter. It is very rare to find winter crops in the mountain zone as winter is severely cold to allow growth of crops.

During this agricultural year, 2005/2006, wheat was mostly grown in Mafeteng with 2,845 hectares, while peas was mostly grown in Maseru with 4,178 hectares. Area planted to wheat and peas at national level was 7,510 and 8,526 hectares respectively in 2005/2006 (Annex table A2). In 2004/2005 11,794 hectares were planted to wheat and 2,804 hectares were planted to peas. Comparatively there has been a decrease of 36 percent in area planted to wheat and an increase of 204 percent in area planted to peas between the two agricultural years 2004/2005 and 2005/2006.

3. Area Harvested

Area harvested for individual crops is the difference between area planted and area that has failed.

3.1 Summer Crops

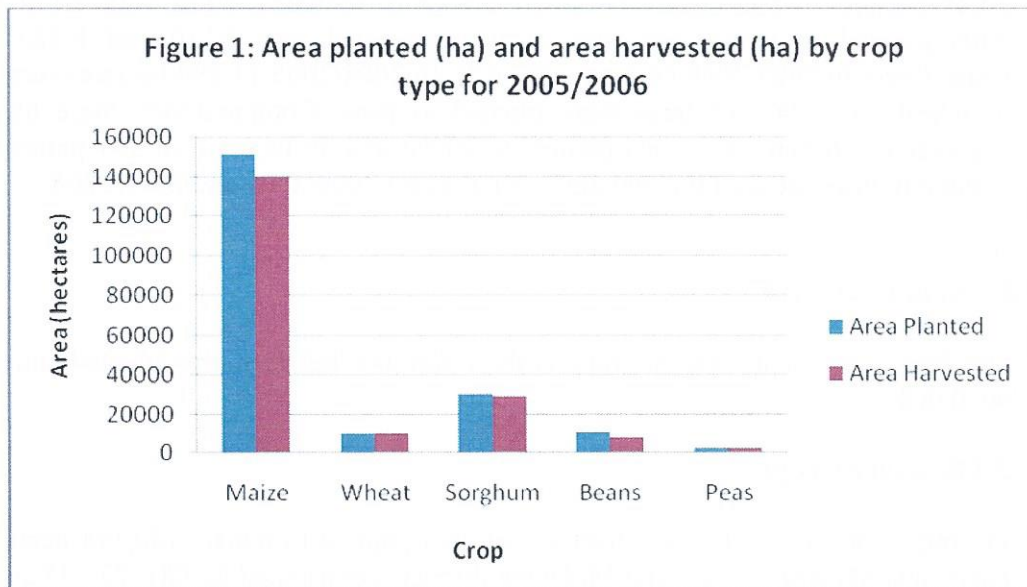
In 2005/2006, out of 151,823 hectares of area planted to maize, 140,194 hectares were harvested. Maseru, Leribe, and Mafeteng districts contributed 42,081, 27,335 and 18,771 hectares to total area harvested for maize respectively (table 2). In 2004/2005 the total area harvested to maize was 112,302, similarly Maseru, Leribe and Mafeteng contributed the higher proportions with 18,230, 20,817 and 18,494 respectively.

For the agricultural year 2005/2006 about 29,071 hectares were harvested to Sorghum, 31,637 to maize & beans mixtures. In 2004/2005, 29,687 and 52,643 hectares were harvested to sorghum and maize & beans mixture respectively thus showing a decrease of 2.1 percent for sorghum and 40 percent for maize & beans mixture in the harvested area for both crops in 2005/2006 compared to the previous year 2004/2005.

Table 2: Area Harvested by Crop and District, Summer 2005/2006 Agricultural Year

District	Maize	Wheat	Sorghum	Beans	Peas
Botha Bothe	4,191	273	545	56	51
Leribe	27,335	1,654	6,667	1,124	222
Berea	13,397	149	2,235	104	0
Maseru	42,081	1,435	3,766	2,472	424
Mafeteng	18,771	30	7,387	1,546	0
Mohale's Hoek	7,824	0	4,593	544	0
Quthing	5,498	68	2,500	806	91
Qacha's Nek	2,825	1,355	433	389	86
Mokhotlong	6,571	2,974	261	96	537
Thaba Tseka	11,699	2,382	685	940	464
Lesotho	140,194	10,320	29,071	8,077	1,874

Figure 1 shows area planted (ha) and area harvested (ha) by crop type for 2005/2006. In the agricultural year 2005/2006, more than 90 percent of total area planted to maize and sorghum was harvested.



3.2 Winter Crops

Total area planted to wheat and peas in 2005/2006 was 7,510 and 8,526 respectively, while area harvested was 7,377 and 8,312 respectively. That shows that crops planted in winter were not much affected by the cold conditions and therefore almost all area planted was harvested.

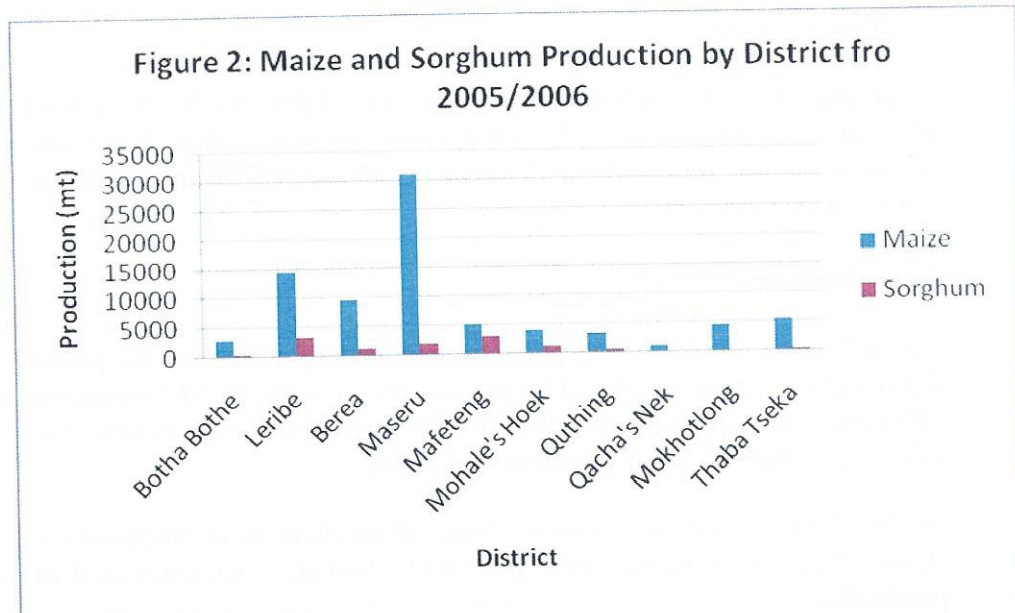
4. Production

Figure 2 shows maize and sorghum production in Lesotho for the period 2005/2006. The figure indicates that in 2005/2006 the country recorded 80,587 metric tones (mt), while in 2004/2005 the country recorded 76,206 metric tones of maize. This showed a 5.7 percentage increase in the production of maize.

In 2005/2006, about 11,216 metric tones of sorghum were produced while in 2004/2005 about 15,828 metric tones were produced, showing a decrease of 4,612mt in sorghum production.

Figure 2, further shows that Maseru recorded the highest production of maize of about 31,117 metric tones followed by Leribe with 14,445mt. Quthing and Qacha's Nek recorded the lowest maize production of 3,090 and 988mt respectively. In 2004/2005, Berea recorded the highest production of Maize of about 15,905, followed by Mohole's Hoek and Thaba-Tseka with 12,655 and 11,006 metric tones of maize respectively. Qacha's Nek recorded the lowest production of maize of about 801 metric tones.

In 2005/2006 Leribe recorded the highest production of sorghum with 3,292 metric tones. Qacha's Nek and Mokhotlong recorded the lowest production of 60 and 36 metric tones respectively. In 2004/2005, Berea, Maseru and Mohales' Hoek recorded the highest production of 4,470, 3,322 and 2,510 metric tones respectively. Botha-Bothe and Mokhotlong recorded the lowest sorghum production of 264 and 40 metric tones respectively.



5. Yield Per Hectare

Table 3 shows maize and sorghum yields by district and zone for the year 2005/2006. Yield is defined as production per area harvested. Yield varies for various crops and zones, and this may be caused by among other factors distribution and frequency of rainfall throughout the country. The country recorded maize and sorghum yields per hectare of 0.57 and 0.39 respectively.

Table 3: Maize and Sorghum yields by district and zone for the year 2005/2006

District	Zone	Maize	Sorghum
Botha Bothe	Lowlands	0.65	0.50
	Foothills	0.65	0.40
	Mountains	0.80	0.10
	Total	0.67	0.44
Leribe	Lowlands	0.56	0.50
	Foothills	0.65	0.40
	Mountains	0.23	0.00
	Total	0.53	0.49
Berea	Lowlands	0.73	0.40
	Foothills	0.61	0.54
	Total	0.70	0.49
Maseru	Lowlands	0.78	0.50
	Foothills	0.48	0.20
	Mountains	0.54	0.10
	Total	0.74	0.47
Mafeteng	Lowlands	0.29	0.40
	Foothills	0.15	0.20
	Total	0.27	0.40
Mohale's Hoek	Lowlands	0.47	0.28
	Foothills	0.68	0.12
	Mountains	0.00	0.13
	SRV	0.55	0.27
	Total	0.50	0.25
Quthing	Mountains	0.68	0.14
	SRV	0.42	0.21
	Total	0.56	0.19
Qacha's Nek	Mountains	0.35	0.15
	SRV	0.38	0.12
	Total	0.35	0.14
Mokhotlong	Mountains	0.68	0.14
Thaba Tseka	Mountains	0.45	0.25
Total		0.57	0.39

6. Area under Crop Failure – Summer Season

6.1 Maize Area (ha) failed

Table 4 shows the total area which failed under maize for the agricultural year 2005/2006. The total area that failed is 11,511 hectares. The most affected districts were Maseru, Mafeteng and Mohale's Hoek with 3,705, 3,040 and 1,609 hectares respectively. As compared to the previous year 2004/2005, the total area which failed under maize was 3,778 hectares. This shows that there has been an increase of 7,733 in area which failed for maize.

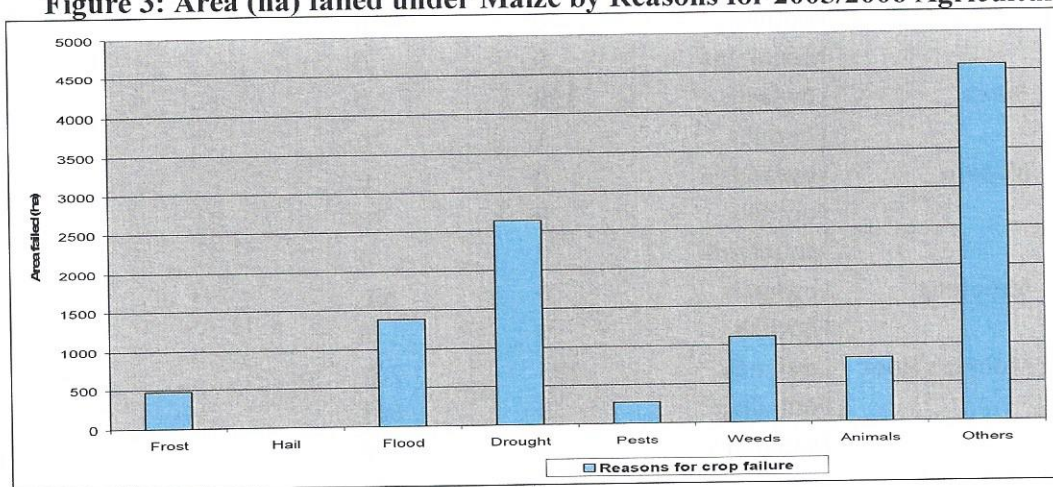
Table 4: Area failed under maize by district and zone

District	Zone	Area failed	
		2004/2005	2005/2006
Botha Bothe	lowlands	0	20
	foothills	51	0
	mountains	1	0
Leribe	lowlands	0	904
	foothills	23	348
	mountains	0	0
Berea	lowlands	1,513	70
	foothills	133	92
Maseru	lowlands	0	3,589
	foothills	0	0
	mountains	0	116
Mafeteng	lowlands	896	2,953
	foothills	0	87
Mohale's Hoek	lowlands	390	676
	foothills	0	698
	mountains	0	235
	S R V	344	0
Quthing	mountains	0	597
	S R V	0	304
Qacha's Nek	mountains	298	650
	S R V	0	0
Mokhotlong	mountains	0	146
Thaba Tseka	mountains	129	28
Total		3,778	11,511

7. Reasons for crop failure- maize

One of the major reasons for a crop not to reach its maturity stage is due to drought and other reasons among others late planting. In the case of 2005/2006 Agricultural Year the main reason for maize failure was due to other reasons such as late planting with 4,608 hectares followed by drought, flood and weeds with 2, 710, 1,449 and 1,150 hectares respectively as shown by figure 3.

Figure 3: Area (ha) failed under Maize by Reasons for 2005/2006 Agricultural Year



8. Sorghum Area Failed

Table 5 shows area failed under sorghum by district and zone. The table shows that Mohale's Hoek had more hectares of area failed under sorghum (841 hectares), Mafeteng followed with 156 hectares. The total area (11,132 hectares) which failed under sorghum was high as compared to 985 hectares of the previous Agricultural Year.

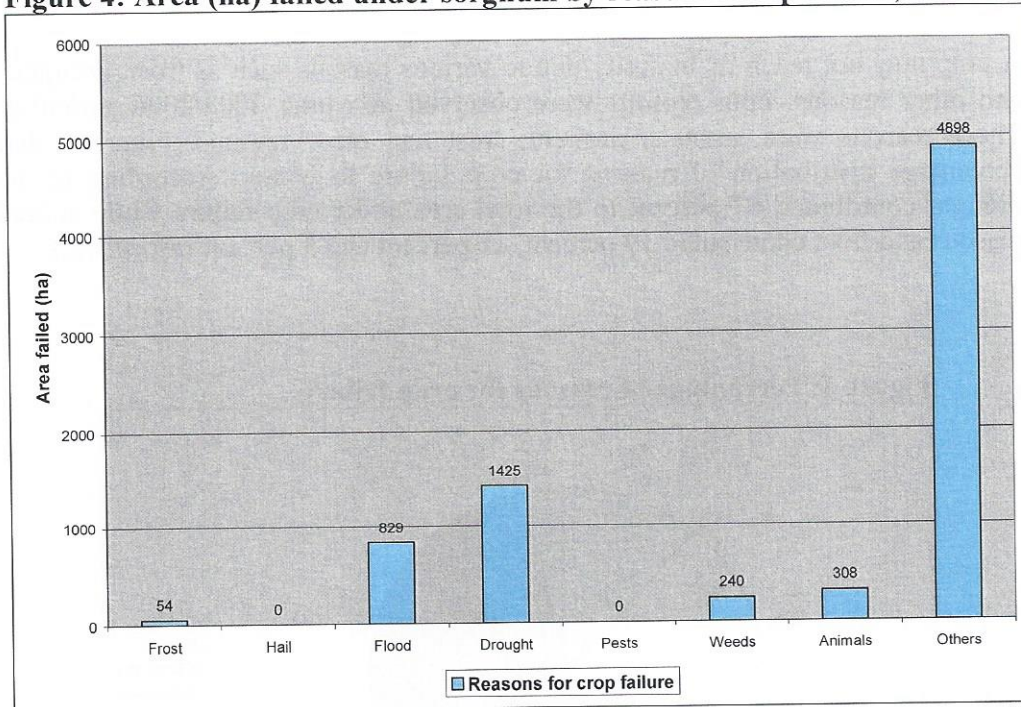
Table 5: Area in hectares failed under sorghum by district and zone

District	Zone	Area failed 2004/2005	Area failed 2005/2006
Botha Bothe	Lowlands	22	0
	Foothills	0	0
	Mountains	0	0
Leribe	Lowlands	0	0
	Foothills	0	0
	Mountains	0	0
Berea	Lowlands	198	0
	Foothills	1	0
Maseru	Lowlands	0	0
	Foothills	0	78
	Mountains	0	0
Mafeteng	Lowlands	0	156
	Foothills	0	0
Mohale's Hoek	Lowlands	193	201
	Foothills	0	501
	Mountains	0	0
	SRV	106	139
Quthing	Mountains	36	50
	SRV	0	7
Qacha's Nek	Mountains	0	0
	SRV	0	0
Mokhotlong	Mountains	0	0
Thaba Tseka	Mountains	29	0
Total		585	1,132

8.1 Reasons for crop failure- sorghum

Figure 4 shows area (ha) failed under sorghum by reason of crop failure. About 4,898 hectares of sorghum was mostly hit by other reasons like late planting and drought.

Figure 4: Area (ha) failed under sorghum by reason of crop failure, 2005/2006



9. Area under Crop Failure-winter season

Table 6 shows crop failure by district/zone and crop type. The table revealed that crop failure in 2005/2006 was experienced in the lowlands and foothills of three districts, Leribe, Mafeteng and Mohale's Hoek. Wheat was mostly affected in the lowlands of Leribe with 122 while peas was mostly affected in the lowlands of Mohale's Hoek with 176. Area failed under wheat was 68 percent of the total area failed. Peas and other crops constitute 59 and 4 percent of the total area failed respectively.

Table 6: Crop failure by district/zone and crop type

District	Zone	Wheat	Peas	Other crops	Total
Leribe	Lowlands	122	33	0	155
Mafeteng	Foothills	0	5	13	18
Mohale's Hoek	Lowlands	0	176	0	176
	Foothills	11	0		11
Total		133	214	13	360

10. Reasons for crop failure – winter

A crop may not reach its maturity due to various reasons such as frost, drought, animals and other reasons. Four reasons were observed in winter 2005/2006 agricultural year. These reasons were animals, drought, frost and other reasons. Figure 5 depicts the percentage distribution of reasons for crop failure in winter. According to the figure, drought contributed 67 percent to the total area under crop failure while animals, other reasons and frost contributed 19 percent, 11 percent and 3 percent respectively.

Figure 5: Percentage of reasons for crop failure

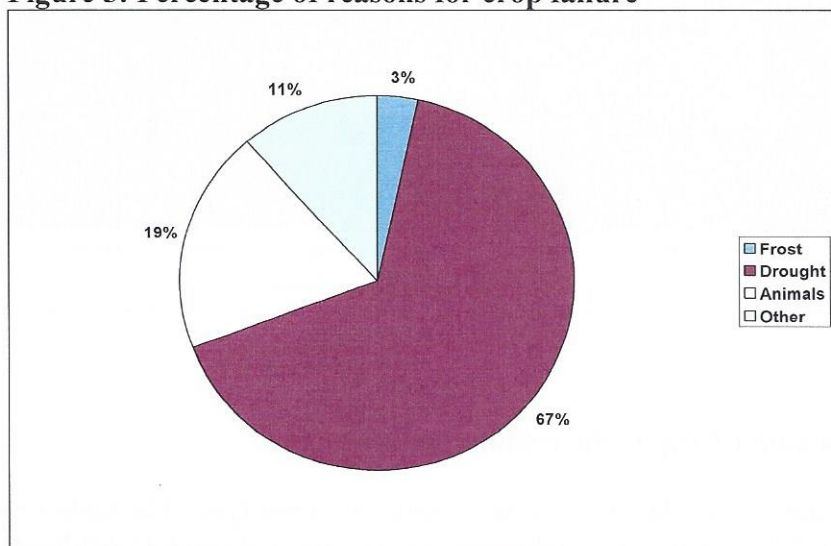


Table A2: Area Planted in Winter by Crop Type, District and Zone, 2005/2006

District	Zone	Wheat	Peas	Barley	Other crops
Botha Bothe	Lowlands	592	526	0	0
	Foothills	12	5	0	0
	Mountains	0	0	0	0
	Total	604	531	0	0
Leribe	Lowlands	1153	140	0	0
	Foothills	0	0	0	0
	Mountains	0	0	0	0
	Total	1153	140	0	0
Berea	Lowlands	1657	741	70	477
	Foothills	17	16	0	0
	Total	1674	757	70	477
Maseru	Lowlands	355	547	122	0
	Foothills	0	106	0	0
	Mountains	0	22	0	4
	Total	355	675	122	4
Mafeteng	Lowlands	2806	2224	1854	1214
	Foothills	39	22	90	170
	Total	2845	2245	1943	1385
Mohale's Hoek	Lowlands	590	4081	76	622
	Foothills	288	97	0	18
	Mountains	0	0	0	0
	SRV	0	0	0	0
	Total	879	4178	76	640
Quthing	Mountains	0	0	0	16
	SRV	0	0	0	41
	Total	0	0	0	57
Qacha's Nek	Mountains	0	0	0	0
	SRV	0	0	0	0
	Total	0	0	0	0
Mokhotlong	Mountains	0	0	0	0
	Total	0	0	0	0
Thaba Tseka	Mountains	0	0	0	0
	SRV	0	0	0	0
	Total	0	0	0	0
Lesotho		7510	8526	2212	2562

Table A4: Area(ha) Harvested in Winter by Crop Type, District and Zone, 2005/2006

District	Zone	Wheat	Peas	Barley	Other crops
Botha Bothe	Lowlands	592	526	0	0
	Foothills	12	5	0	0
	Mountains	0	0	0	0
	Total	604	531	0	0
Leribe	Lowlands	1031	107	0	0
	Foothills	0	0	0	0
	Mountains	0	0	0	0
	Total	1031	107	0	0
Berea	Lowlands	1657	741	70	477
	Foothills	17	16	0	0
	Total	1674	757	70	477
Maseru	Lowlands	355	547	122	0
	Foothills	0	106	0	0
	Mountains	0	22	0	4
	Total	355	675	122	4
Mafeteng	Lowlands	2806	2224	1854	1214
	Foothills	39	17	90	170
	Total	2845	2240	1943	1385
Mohale's Hoek	Lowlands	590	3904	76	622
	Foothills	277	97	0	18
	Mountains	0	0	0	0
	SRV	0	0	0	0
	Total	868	4001	76	640
Quthing	Mountains	0	0	0	16
	SRV	0	0	0	41
	Total	0	0	0	57
Qacha's Nek	Mountains	0	0	0	0
	SRV	0	0	0	0
	Total	0	0	0	0
Mokhotlong	Mountains	0	0	0	0
	Total	0	0	0	0
Thaba Tseka	Mountains	0	0	0	0
	SRV	0	0	0	0
	Total	0	0	0	0
Lesotho		7377	8312	2212	2562

Table A5: Summer Production Estimates by Crop Type, District and Zone, 2005/2006

District	Zone	Maize	Wheat	Sorghum	Beans	Peas	
Botha Bothe	Lowlands	890	0	112		3	0
	Foothill	1414	0	128		0	2
	Mountain	510	63	0		4	4
	Total	2813	63	240		7	5
Leribe	Lowlands	12756	0	3125		329	2
	Foothill	991	0	167		9	0
	Mountain	698	827	0		17	71
	Total	14445	827	3292		355	73
Berea	Lowlands	7341	22	290		7	0
	Foothill	2023	0	816		8	0
	Total	9364	22	1106		15	0
Maseru	Lowlands	27696	0	1686		340	0
	Foothill	1032	0	54		0	0
	Mountain	2388	574	12		5	191
	Total	31117	574	1753		344	191
Mafeteng	Lowlands	4876	5	2895		515	0
	Foothill	261	0	30		7	0
	Total	5137	5	2925		522	0
Mohale's Hoek	Lowlands	2663	0	787		35	0
	Foothill	322	0	57		0	0
	Mountain	0	0	35		0	0
	SRV	944	0	280		38	0
	Total	3929	0	1159		73	0
Quthing	Mountain	2081	15	103		82	13
	SRV	1009	2	371		37	0
	Total	3090	17	474		118	13
Qacha's Nek	Mountain	904	328	42		49	11
	SRV	84	6	18		8	1
	Total	988	334	60		57	12
Mokhotlong	Mountain	4440	446	36		12	134
	Total	4440	446	36		12	134
Thaba Tseka	Mountain	5265	572	171		216	241
	Total	5265	572	171		216	241
Lesotho		80587	2860	11216		1721	669

Table A6: Winter Production Estimates by Crop Type, District and Zone, 2005/2006

District	Zone	Wheat	Peas
Botha Bothe	Lowlands	266	132
	Foothill	1	1
	Mountain	0	0
	Total	268	132
Leribe	Lowlands	557	13
	Foothill	0	0
	Mountain	0	0
	Total	557	13
Berea	Lowlands	878	185
	Foothill	2	2
	Total	881	187
Maseru	Lowlands	92	192
	Foothill	0	32
	Mountain	0	4
	Total	92	228
Mafeteng	Lowlands	1403	712
	Foothill	9	2
	Total	1412	714
Mohale's Hoek	Lowlands	148	1367
	Foothill	222	12
	Mountain	0	0
	SRV	0	0
	Total	369	1378
Quthing	Mountain	0	0
	SRV	0	0
	Total	0	0
Qacha' s Nek	Mountain	0	0
	SRV	0	0
	Total	0	0
Mokhotlong	Mountain	0	0
	Total	0	0
Thaba Tseka	Mountain	0	0
	Total	0	0
Lesotho		3579	2652

Table A8: Area Failed in Winter by Crop type and district/zone.2005/2006

District	Zone	Wheat	Peas	Other cops
Botha Bothe	lowlands	0	0	0
	foothills	0	0	0
	mountains	0	0	0
	Total	0	0	0
Leribe	lowlands	122	33	0
	foothills	0	0	0
	mountains	0	0	0
	Total	122	33	0
Berea	lowlands	0	0	0
	foothills	0	0	0
	Total	0	0	0
Maseru	lowlands	0	0	0
	foothills	0	0	0
	mountains	0	0	0
	Total	0	0	0
Mafeteng	lowlands	0	0	0
	foothills	0	5	13
	Total	0	5	13
Mohale's Hoek	lowlands	0	176	0
	foothills	11	0	0
	mountains	0	0	0
	SRV	0	0	0
	Total	11	176	0
Quthing	mountains	0	0	0
	SRV	0	0	0
	Total	0	0	0
Qacha's Nek	mountains	0	0	0
	SRV	0	0	0
	Total	0	0	0
Mokhotlong	mountains	0	0	0
	Total	0	0	0
Thaba Tseka	mountains	0	0	0
	Total	0	0	0
Lesotho		133	239	13

Table A9: Area Planted and Area Fallow in Summer and Winter by District and zone, 2005/2006

		Summer		Winter	
		Planted	Fallow	Planted	Fallow
Botha Bothe	Lowlands	2561	1537	269	3508
	Foothill	6936	824	0	7855
	Mountain	1182	6	0	1233
	Total	10680	2367	269	12596
Leribe	Lowlands	39300	6906	2969	53692
	Foothill	7637	719	0	8206
	Mountain	5205	113	0	5940
	Total	52142	7738	2969	67838
Berea	Lowlands	12361	4898	1495	28819
	Foothill	6885	1360	0	8649
	Total	19246	6259	1495	37468
Maseru	Lowlands	49251	12834	2705	43176
	Foothill	5398	2378	21	15217
	Mountain	7063	424	0	7383
	Total	61713	15636	2725	65776
Mafeteng	Lowlands	33158	9680	5098	43025
	Foothill	2270	730	0	0
	Total	35428	10410	5098	43025
Mohale's Hoek	Lowlands	11797	7434	1747	18313
	Foothill	2470	3328	636	6544
	Mountain	1513	333	0	5401
	SRV	5687	1967	3	7601
	Total	21467	13062	2386	37859
Quthing	Mountain	5569	1383	0	7248
	SRV	5714	2095	0	11075
	Total	11283	3477	0	18323
Qacha' s Nek	Mountain	7057	1798	0	4824
	SRV	1033	1148	0	2450
	Total	8090	2946	0	7274
Mokhotlong	Mountain	11698	470	0	8996
	Total	11698	470	0	8996
Thaba Tseka	Mountain	20829	947	0	19006
	Total	20829	947	0	19006
Lesotho		252575	63312	14942	318162